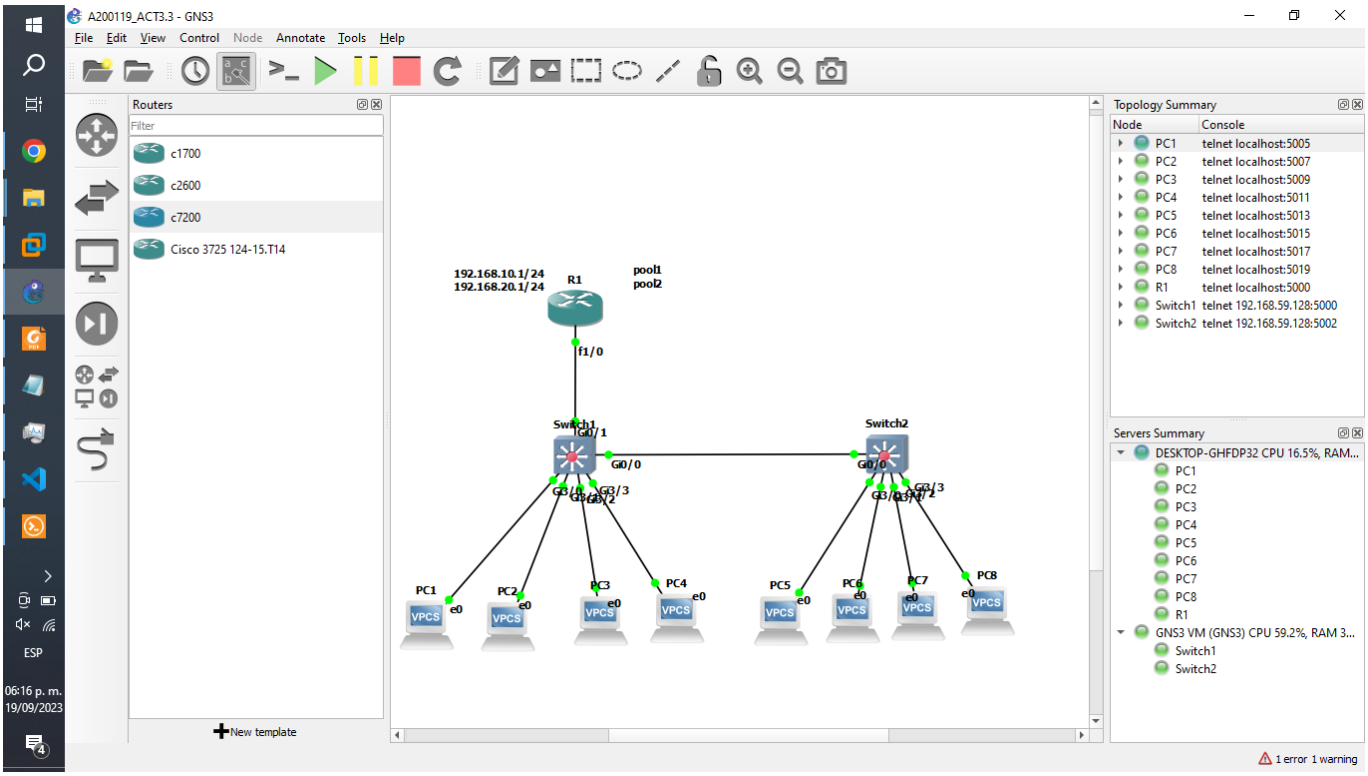
Act. 3.3 Configurar un Router con GNS3 con DHCP con 2 segmentos VLANS VTP.

Topologia.



Switch 1 VTP SERVER.

```
Switch>
Switch>
Switch>ena
Switch#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#vlan 10
Switch(config-vlan)#name VLAN 10
Switch(config-vlan)#exit
Switch(config)#vlan 20
Switch(config-vlan)#name VLAN 20
Switch(config-vlan)#exit
Switch(config)#vtp mode server
Device mode already VTP Server for VLANS.
Switch(config)#vtp domain cisco-1
Changing VTP domain name from NULL to cisco-1
Switch(config)#
*Sep 19 22:39:20.339: %SW_VLAN-6-VTP_DOMAIN_NAME_CHG: VTP domain name changed to
cisco-1.
Switch(config)#
Switch(config)#vtp password cisco
```

```
Setting device VTP password to cisco
Switch(config)#interface g0/1
Switch(config-if)#switchport trunk encapsulation dot1q
Switch(config-if)#switchport mode trunk
Switch(config-if)#no shutdown
Switch(config-if)#exit
Switch(config)#interface g0/0
Switch(config-if)#switchport trunk encapsulation dot1q
Switch(config-if)#switchport mode trunk
Switch(config-if)#no shutdown
Switch(config-if)#exit
Switch(config)#do wr
Building configuration...
Compressed configuration from 3624 bytes to 1629 bytes[OK]
Switch(config)#
*Sep 19 22:43:50.619: %GRUB-5-CONFIG_WRITING: GRUB configuration is being updated
on disk. Please wait...
*Sep 19 22:43:51.389: %GRUB-5-CONFIG_WRITTEN: GRUB configuration was written to
disk successfully.
Switch(config)#
```

Switch 2 VTP CLIENT.

```
Switch>ena
Switch#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#vtp mode client
Setting device to VTP Client mode for VLANS.
Switch(config)#vtp domain cisco-1
Changing VTP domain name from NULL to cisco-1
Switch(config)#
*Sep 19 22:50:00.651: %SW_VLAN-6-VTP_DOMAIN_NAME_CHG: VTP domain name changed to
cisco-1.
Switch(config)#vtp password cisco
Setting device VTP password to cisco
Switch(config)#
```

Switch 1 INTERFACES VLAN.

```
Switch>ena
Switch#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#interface range g3/0 - 3
Switch(config-if-range)#switchport access vlan 10
Switch(config-if-range)#exit
Switch(config)#do wr
Building configuration...
```

```
Compressed configuration from 3732 bytes to 1679 bytes[OK]
Switch(config)#
Switch(config)#
*Sep 19 22:57:25.515: %GRUB-5-CONFIG_WRITING: GRUB configuration is being updated
on disk. Please wait...
*Sep 19 22:57:26.372: %GRUB-5-CONFIG_WRITTEN: GRUB configuration was written to
disk successfully.
Switch(config)#
```

Switch 2 INTERFACES VLAN.

```
Switch>ena
Switch#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#interface range g3/0 - 3
Switch(config-if-range)#switchport access vlan 20
Switch(config-if-range)#exit
Switch(config)#do wr
Building configuration...
Compressed configuration from 3610 bytes to 1613 bytes[OK]
Switch(config)#
*Sep 19 23:02:10.145: %GRUB-5-CONFIG_WRITING: GRUB configuration is being updated
on disk. Please wait...
*Sep 19 23:02:11.003: %GRUB-5-CONFIG_WRITTEN: GRUB configuration was written to
disk successfully.
Switch(config)#
```

Switch 1 REVISAMOS SU CONFIGURACION.

```
Switch>ena
Switch#show vtp status
VTP Version capable             : 1 to 3
VTP version running             : 1
VTP Domain Name                 : cisco-1
VTP Pruning Mode                : Disabled
VTP Traps Generation            : Disabled
Device ID                       : 0c3f.f436.8000
Configuration last modified by 0.0.0.0 at 9-19-23 22:38:55
Local updater ID is 0.0.0.0 (no valid interface found)

Feature VLAN:
--------------
VTP Operating Mode                : Server
Maximum VLANs supported locally   : 1005
Number of existing VLANs          : 7
Configuration Revision            : 2
MD5 digest                        : 0x0C 0xC5 0x68 0xC4 0xBD 0x4F 0x08 0x98
```

```
                                    0x51 0x0E 0x56 0x86 0x26 0xBD 0x82 0x57
Switch#
```

Switch 2 REVISAMOS SU CONFIGURACION.

```
Switch>
Switch>ena
Switch#show vtp status
VTP Version capable             : 1 to 3
VTP version running             : 1
VTP Domain Name                 : cisco-1
VTP Pruning Mode                : Disabled
VTP Traps Generation            : Disabled
Device ID                       : 0c80.e4ff.8000
Configuration last modified by 0.0.0.0 at 9-19-23 22:38:55

Feature VLAN:
--------------
VTP Operating Mode                : Client
Maximum VLANs supported locally   : 1005
Number of existing VLANs          : 7
Configuration Revision            : 2
MD5 digest                        : 0x0C 0xC5 0x68 0xC4 0xBD 0x4F 0x08 0x98
                                    0x51 0x0E 0x56 0x86 0x26 0xBD 0x82 0x57
Switch#
```

Router SUBINTERFACES VLANS 10 Y 20.

```
R1#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
R1(config)#interface f1/0.10
R1(config-subif)#encapsulation dot1q 10
R1(config-subif)#ip address 192.168.10.1 255.255.255.0
R1(config-subif)#exit
R1(config)#interface f1/0.20
R1(config-subif)#encapsulation dot1q 20
R1(config-subif)#ip address 192.168.20.1 255.255.255.0
R1(config-subif)#exit
R1(config)#interface f1/0
R1(config-if)#no shutdown
R1(config-if)#exit
R1(config)#
*Sep 19 17:48:14.547: %LINK-3-UPDOWN: Interface FastEthernet1/0, changed state to
up
*Sep 19 17:48:15.547: %LINEPROTO-5-UPDOWN: Line protocol on Interface
FastEthernet1/0, changed state to up
R1(config)#do wr
```

```
Warning: Attempting to overwrite an NVRAM configuration previously written
by a different version of the system image.
Overwrite the previous NVRAM configuration?[confirm]
Building configuration...
[OK]
R1(config)#
```

Router POOLS CISCO1 Y CISCO2.

```
R1#
*Sep 19 17:48:34.107: %SYS-5-CONFIG_I: Configured from console by console
R1#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
R1(config)#ip dhcp pool cisco1
R1(dhcp-config)#network 192.168.10.0 255.255.255.0
R1(dhcp-config)#dns-server 8.8.8.8
R1(dhcp-config)#exit
R1(config)#ip dhcp pool cisco2
R1(dhcp-config)#network 192.168.20.0 255.255.255.0
R1(dhcp-config)#dns-server 8.8.8.8
R1(dhcp-config)#exit
R1(config)#do wr
Building configuration...
[OK]
R1(config)#
```

Router RIP.

```
R1#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
R1(config)#router rip
R1(config-router)#version 2
R1(config-router)#no auto-summary
R1(config-router)#network 192.168.10.0
R1(config-router)#network 192.168.20.0
R1(config-router)#exit
R1(config)#do wr
Building configuration...
[OK]
```

DHCP.

```
PC1> dhcp
DDORA IP 192.168.10.2/24 GW 192.168.10.1
PC1> ping 192.168.20.2
```

```
192.168.20.2 icmp_seq=1 timeout
192.168.20.2 icmp_seq=2 timeout
84 bytes from 192.168.20.2 icmp_seq=3 ttl=63 time=32.212 ms
84 bytes from 192.168.20.2 icmp_seq=4 ttl=63 time=32.281 ms
84 bytes from 192.168.20.2 icmp_seq=5 ttl=63 time=32.114 ms

PC8> dhcp
DDORA IP 192.168.20.2/24 GW 192.168.20.1
PC8> ping 192.168.10.2
192.168.10.2 icmp_seq=1 timeout
192.168.10.2 icmp_seq=2 timeout
84 bytes from 192.168.10.2 icmp_seq=3 ttl=63 time=32.212 ms
84 bytes from 192.168.10.2 icmp_seq=4 ttl=63 time=32.281 ms
84 bytes from 192.168.10.2 icmp_seq=5 ttl=63 time=32.114 ms
```

Repositorio de Github

```
https://github.com/Gilberto-Guzman/Conmutadores-Y-Redes-
Inalambricas/tree/main/Act.%203.3%20Configurar%20un%20Router%20con%20GNS3%20con%20
DHCP%20con%202%20segmentos%20VLANS%20VTP
```